

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An electro-luminescence device, comprising:

a transparent substrate;

a plurality of pixel areas including a plurality of scanning lines and a plurality of data lines formed on the transparent substrate;

a plurality of pixel electrodes formed on the plurality of pixel areas;

an electro-luminescent layer formed over the plurality of pixel electrodes;

a metal electrode formed on the electro-luminescent layer;

a seal cover plate for sealing the electro-luminescent layer;

a sealant for adhering the seal cover plate to the transparent substrate; ~~and~~

a heat-exhausting layer formed on the metal electrode; and

a protective film formed between the seal cover plate and the heat-exhausting layer

wherein the protective film has a multi-layer structure of at least a moisture-absorbing layer and a moisture-proof layer.

Claim 2 (cancelled)

Claim 3 (currently amended): An ~~[[The]]~~ electro-luminescence device ~~according to claim 2, comprising:~~

a transparent substrate;

a plurality of pixel areas including a plurality of scanning lines and a plurality of data lines formed on the transparent substrate;

a plurality of pixel electrodes formed on the plurality of pixel areas;

an electro-luminescent layer formed over the plurality of pixel electrodes;

a metal electrode formed on the electro-luminescent layer;

a seal cover plate for sealing the electro-luminescent layer;

a sealant for adhering the seal cover plate to the transparent substrate;

a heat-exhausting layer formed on the metal electrode; and

a protective film formed between the seal cover plate and the heat-exhausting layer

wherein the protective film has a single-layer structure of a moisture-absorbing layer or a moisture-proof layer, ~~or a multi-layer structure of the moisture-absorbing layer and the moisture-proof layer.~~

Claim 4 (original): The electro-luminescence device according to claim 1, further comprising:

a moisture-absorbing agent provided at the inner side of the seal cover plate opposed to the metal electrode to absorb moisture and oxygen from the electro-luminescent layer.

Claim 5 (currently amended): The electro-luminescence device according to claim 4, further comprising:

a semi-transmissive film for ~~preventing the moisture-absorbing agent from being detached from the electro-luminescent layer~~ supporting the moisture absorbing agent to be held at the inner side of the seal cover plate.

Claim 6 (currently amended): The electro-luminescence device according to claim 4, wherein the moisture-absorbing agent is selected from any one of [[Eg,]] BaO, CaO, CaCO₃, zeolite, silicagel and alumina.

Claim 7 (original): The electro-luminescence device according to claim 1, wherein the heat-exhausting layer is formed from a carbon group material.

Claim 8 (original): The electro-luminescence device according to claim 7, wherein the carbon group material is selected from any one of DLC, a-C:H, graphite, a carbon film and a carbon sheet.

Claim 9 (original): The electro-luminescence device according to claim 1, wherein the heat-exhausting layer is formed by any one of a deposition, a coating and a taping.

Claim 10 (original): An electro-luminescence device, comprising:

- a transparent substrate;
- a plurality of pixel areas including a plurality of scanning lines and a plurality of data lines formed on the transparent substrate;
- a plurality of pixel electrodes formed on the plurality of pixel areas;
- an electro-luminescent layer over the plurality of pixel electrodes;
- a metal electrode formed on the electro-luminescent layer;
- a seal cover plate for sealing the electro-luminescent layer;

a sealant for adhering the seal cover plate to the transparent substrate; and
a heat-exhausting layer formed on the seal cover plate.

Claim 11 (original): The electro-luminescence device according to claim 10, further comprising:

a protective film formed on the metal electrode.

Claim 12 (original): The electro-luminescence device according to claim 11, wherein the protective film has a single-layer structure of a moisture-absorbing layer or a moisture-proof layer, or a multi-layer structure of the moisture-absorbing layer and the moisture-proof layer.

Claim 13 (original): The electro-luminescence device according to claim 10, further comprising:

a moisture-absorbing agent provided at the inner side of the seal cover plate opposed to the metal electrode to absorb moisture and oxygen from the electro-luminescent layer.

Claim 14 (currently amended): The electro-luminescence device according to claim 13, further comprising:

a semi-transmissive film for ~~preventing the moisture-absorbing agent from being detached from the electro-luminescent layer~~ supporting the moisture absorbing agent to be held at the inner side of the seal cover plate.

Claim 15 (currently amended): The electro-luminescence device according to claim 13,

wherein the moisture-absorbing agent is selected from any one of [[Eg,]] BaO, CaO, CaCO₃, zeolite, silicagel and alumina.

Claim 16 (original): The electro-luminescence device according to claim 10, wherein the heat-exhausting layer is formed from a carbon group material.

Claim 17 (original): The electro-luminescence device according to claim 16, wherein the carbon group material is selected from any one of DLC, a-C:H, graphite, a carbon film and a carbon sheet.

Claim 18 (original): The electro-luminescence device according to claim 10, wherein the heat-exhausting layer is formed by any one of a deposition, a coating and a taping.

Claim 19 (currently amended): An electro-luminescence device, comprising:

a transparent substrate;

a plurality of pixel areas including a plurality of scanning lines and a plurality of data lines formed on the transparent substrate;

a plurality of pixel electrodes formed on the plurality of pixel areas;

an electro-luminescent layer over the plurality of pixel electrodes;

a metal electrode formed on the electro-luminescent layer;

a protective film formed on the metal electrode to prevent [an] exposure of the metal electrode; and

a heat-exhausting layer provided on the protective film.

Claim 20 (original): The electro-luminescence device according to claim 19, further comprising:

a seal cover plate provided on the heat-exhausting layer to seal the electro-luminescent layer; and

a sealant for adhering the seal cover plate to the transparent substrate.

Claim 21 (currently amended): The electro-luminescence device according to claim 20, wherein said heat-exhausting layer [[is]] prevents exposure of the protective film.

Claim 22 (original): The electro-luminescence device according to claim 19, wherein the protective film has a single-layer structure of a moisture-absorbing layer or a moisture-proof layer, or a multi-layer structure of the moisture-absorbing layer and the moisture-proof layer.

Claim 23 (original): The electro-luminescence device according to claim 19, wherein the heat-exhausting layer is formed from a carbon group material.

Claim 24 (original): The electro-luminescence device according to claim 23, wherein the carbon group material is selected from any one of DLC, a-C:H, graphite, a carbon film and a carbon sheet.

Claim 25 (original): The electro-luminescence device according to claim 19, wherein the heat-exhausting layer is formed by any one of a deposition, a coating and a taping.

Claim 26 (currently amended): An electro-luminescence device, comprising:

- a transparent substrate;
- a plurality of pixel areas including a plurality of scanning lines and a plurality of data lines formed on the transparent substrate;
- a plurality of pixel electrodes formed on the plurality of pixel areas;
- an electro-luminescent layer over the plurality of pixel electrodes;
- a metal electrode formed on the electro-luminescent layer;
- a seal cover plate formed in a plane to seal the electro-luminescent layer;
- a metal thin film provided ~~[[on]]~~ under the seal cover plate to smoothly transfer heat; and
- a sealant for adhering the seal cover plate and the metal thin film to the transparent substrate, said sealant having a space for injecting an inactive gas.

Claim 27 (original): The electro-luminescence device according to claim 26, further comprising:

a moisture-absorbing agent formed at the inner side of the seal cover plate opposed to the metal electrode to absorb moisture and oxygen from the electro-luminescent layer.

Claim 28 (currently amended): The electro-luminescence device according to claim 27, further comprising:

a semi-transmissive film for ~~preventing the moisture-absorbing agent from being detached from the electro-luminescent layer~~ supporting the moisture absorbing agent to be held at the inner side of the seal cover plate.

Claim 29 (currently amended): The electro-luminescence device according to claim 28, wherein the moisture-absorbing agent is selected from any one of [[Eg,]] BaO, CaO, CaCO₃, zeolite, silicagel and alumina.

Claim 30 (original): The electro-luminescence device according to claim 28, wherein the metal thin film is provided between the seal cover plate and the moisture-absorbing agent and adheres to the entire surface of the seal cover plate.

Claim 31 (original): The electro-luminescence device according to claim 28, wherein the metal thin film adheres to a portion of the seal cover plate on which the moisture-absorbing agent is not formed.

Claim 32 (original): The electro-luminescence device according to claim 28, wherein the metal thin film adheres to a portion of the seal cover plate on which the moisture-absorbing agent is not formed and the sealant is not attached.

Claim 33 (currently amended): The electro-luminescence device according to claim 26, wherein the sealant is made from an ~~ultraviolet hardening~~ epoxy resin.